LISTING OF CLAIMS:

1-14. (Canceled).

15. (Previously Presented) A method for determining state variables and parameters of a mathematical energy storage model by a state variable and parameter estimator, comprising:

causing the state variable and parameter estimator to calculate the state variables and the parameters of the mathematical energy storage model from operating variables of an energy storage device, wherein:

the state variable and parameter estimator includes a plurality of mathematical submodels that are validly applicable for at least one of different working ranges and different frequency ranges of the energy storage device, and

the state variables and parameters are used to perform one of energy management and user management of an electrical network.

16. (Previously Presented) The method as recited in Claim 15, wherein:

the mathematical model is of a battery model.

17. (Previously Presented) The method as recited in Claim 15, further comprising:

supplying one of a current and a voltage of the energy storage device to the submodels; and

restricting one of a current and a voltage restricted by a filter to the frequency range valid for at least one of the submodels.

18. (Previously Presented) The method as recited in Claim 15, further comprising:

ascertaining an error between an operating variable of the energy storage device and an operating variable calculated by one of the submodels; and

feeding back the error into the respective submodel.

19. (Previously Presented) The method as recited in Claim 18, further comprising:

feeding back the error into another one of the submodels.

20. (Previously Presented) The method as recited in Claim 18, further comprising:

weighing the error in accordance with a factor.

21. (Previously Presented) The method as recited in Claim 15, further comprising:

supplying one of a state variable calculated by one of the submodels and a calculated parameter to another of the submodels.

22. (Previously Presented) The method as recited in Claim 21, further comprising:

feeding back one of the state variable and the calculated parameter in a weighted state.

23. (Previously Presented) The method as recited in Claim 15, further comprising:

providing a stimulator in order to bring one of a current and a voltage that will be supplied to the submodels into one of a desired working range and a frequency range.

24. (Previously Presented) A state variable and parameter estimator for determining state variables and parameters of a mathematical energy storage model, comprising:

an arrangement for calculating the state variables and the parameters from operating variables of an energy storage device; and

an arrangement for storing a plurality of submodels that are valid for at least one of different working ranges and different frequency ranges of the energy storage device.

25. (Previously Presented) The state variable and parameter estimator as recited in Claim 24, wherein:

the mathematical model is of a battery model.

26. (Previously Presented) The state variable and parameter estimator as recited in Claim 24, further comprising:

a filter preconnected to at least one of the submodels in order to restrict the operating variables supplied to the submodels to the frequency range that is valid for one of the submodels.

27. (Previously Presented) The state variable and parameter estimator as recited in Claim 24, further comprising:

an arrangement for ascertaining an error between an operating variable of the energy storage device and an operating variable calculated by one of the submodels; and

an arrangement for feeding back the error into the respective submodel.

28. (Previously Presented) The state variable and parameter estimator as recited in Claim 27, further comprising:

an arrangement for feeding back the error into another submodel.

29. (Previously Presented) The state variable and parameter estimator as recited in Claim 27, further comprising:

an arrangement for weighting the error that is fed back.

30. (Previously Presented) The state variable and parameter estimator as recited in Claim 24, further comprising:

a stimulator for bringing one of a current curve and a voltage curve to be supplied to the submodels into one of a desired working range and a desired frequency range.

31. (New) The state variable and parameter estimator as recited in Claim 24, further comprising:

a filter preconnected to at least one of the submodels in order to restrict the operating variables supplied to the submodels to the frequency range that is valid for one of the submodels;

wherein the mathematical model is of a battery model.

32. (New) The state variable and parameter estimator as recited in Claim 31, further comprising:

an arrangement for ascertaining an error between an operating variable of the energy storage device and an operating variable calculated by one of the submodels; and

an arrangement for feeding back the error into the respective submodel.

33. (New) The state variable and parameter estimator as recited in Claim 32, further comprising:

an arrangement for feeding back the error into another submodel; and

an arrangement for weighting the error that is fed back.

34. (New) The state variable and parameter estimator as recited in Claim 31, further comprising:

a stimulator for bringing one of a current curve and a voltage curve to be supplied to the submodels into one of a desired working range and a desired frequency range.

35. (New) The method as recited in Claim 15, further comprising:

supplying one of a current and a voltage of the energy storage device to the submodels; and

restricting one of a current and a voltage restricted by a filter to the frequency range valid for at least one of the submodels;

wherein the mathematical model is of a battery model.

36. (New) The method as recited in Claim 35, further comprising:

ascertaining an error between an operating variable of the energy storage device and an operating variable calculated by one of the submodels;

feeding back the error into the respective submodel; and

feeding back the error into another one of the submodels.

37. (New) The method as recited in Claim 36, further comprising:

weighing the error in accordance with a factor; and

supplying one of a state variable calculated by one of the submodels and a calculated parameter to another of the submodels.

38. (New) The method as recited in Claim 37, further comprising:

feeding back one of the state variable and the calculated parameter in a weighted state.

39. (New) The method as recited in Claim 35, further comprising:

providing a stimulator in order to bring one of a current and a voltage that will be supplied to the submodels into one of a desired working range and a frequency range.